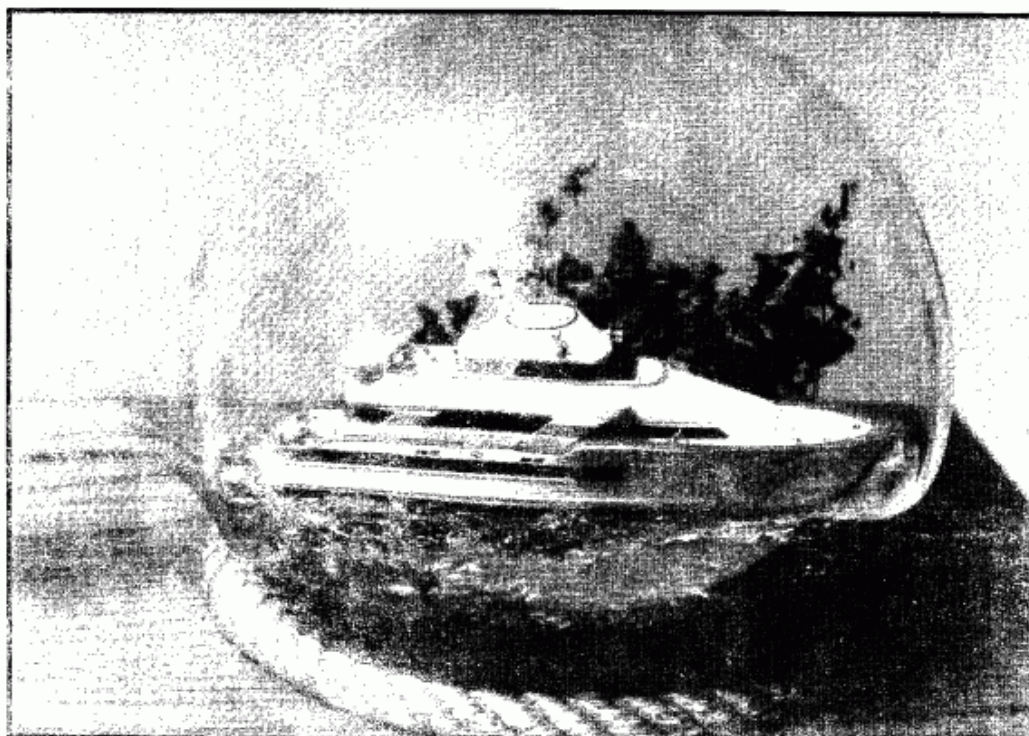


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THE BOTTLE SHIPWRIGHT is the journal of the Ships-in-Bottles Association of America. Production and mailing are handled by unpaid volunteer members of the Association. The Journal is published quarterly and is dedicated to the promotion of the traditional nautical art of building ships-in-bottles.

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MEMBERSHIP in the Association is open to any person regardless of ability as a ship-in-bottle builder. For membership application, please write the Membership Chairman - Steve Hahn, 252 Poskus St., Stoughton, MA 02072, USA. Annual dues are \$15.00 for both North American and overseas members.

ARTICLES and PHOTOGRAPHS for publication in THE BOTTLE SHIPWRIGHT should be sent to the Editor at 3 Dexter St., Newburyport, MA. 01950, USA. Material which should be returned to the sender should be clearly indicated. Every effort will be made to safeguard such material but the Association cannot be responsible for possible loss or damage. The Editor may be required to modify articles or submissions within the context of the original to fit the format and page length of the publication. All of your articles will be welcomed. Deadline for submission is the second month of each quarter.

Jack Hinkley, President
Alex Bellinger, Editor
Don Hubbard, Assistant Editor
Steven Hahn, Treasurer and Membership
Saul Bobroff, Technical Operations



Decals and patches for the Ships-in-Bottles Association of America are available from JIM DAVISON, 1924 Wickham Ave., Royal Oak, Mich. 48073. Please send check or money order, payable to James H. Davison.

The 4" embroidered patches are \$3.00 each and the 3" decals with easy-peel backing are \$1.25 each, or 2 for \$2.00. Jim has also just developed a 3" metal badge with our emblem, available for \$4.00

Cover Photo - George Pinter's custom model of the DOUBLE O SEVEN. See article on pages 4 - 9 of this issue.

The Bottle Shipwright

Volume 6, Number 2

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NOTICE FROM THE TREASURER

To All Members,

Recent increases in printing, postage and operating expenses have made it necessary to raise dues. Our Association operates strictly on a non profit basis, and is staffed entirely by volunteers.

Our next issue begins our next fiscal year and all membership dues are due on receiving this notice. The new rates are as follows:

Annual dues.....	\$15.00
Back Issues.....	\$4.00

Based on current and projected costs, no further increases should be necessary before our 1992 year. I would also like to take this opportunity to thank members who have made donations to the Association and members who have written in to express their support and satisfaction with the journal. These are deeply appreciated.

Very truly yours,



Steven Hahn

Treasurer and Membership

Back Issues - These have been of interest to many, especially those joining us more recently. There have been four issues for each year since 1983. Except for some of the more recent issues, we do not have copies from the original printings, but have been xeroxing copies for members who have requested them. Though the print quality is not quite as high, many members who have collected these value the information and tips they contain. Saul Bobroff will be handling reprints and answers to requests. For information, please write to:

Saul Bobroff
31 Washington St.,
Beverly, MA 01915.

FROM THE PRESIDENT

In our last BOTTLE SHIPWRIGHT my comments concerned two War of 1812 vessels that were found intact and exceptionally well preserved on the bottom of Lake Ontario in Canada. In these comments I would like to relate a moving and inspiring event concerning these two ships. In Confederation Park, in Hamilton, Ontario, there is the HAMILTON/SCOURGE Naval Memorial Garden and the headstones for the 53 sailors from the two ships. Amid trees and flowers, and with Lake Ontario in the background, a typical naval flagstaff raises the colors of the United States, Canada and Great Britain - the participants of the War of 1812, and therefore, all involved with the Ghost Ships.

Each year, on the anniversary of the sinkings, the HAMILTON SCOURGE Project commemorates them in some special way. On August 7th, 1988, the 175th anniversary, the sinkings were commemorated with the blessing and launching of a full size replica of HAMILTON's small boat, which still lies with her on the lake bottom. The replica was constructed from plans drawn from the underwater photographs of the original and was built by the same methods as those used in the days of the War of 1812. The ceremony was attended by a contingent of sailors from Perry's NIAGRA in Erie, Pennsylvania, and contingents of the BEE Naval Brigade, Historic Naval and Military Establishment, of Pentang, Ontario, all in uniforms of the period. These men rowed the replica boat to a small inlet near the park. Officials from both countries made introductions and speeches, each pledging to go forward in the effort to actually raise the ships.

I marveled at the scene in which I had just participated. SHIPS had brought all this about. SHIPS had caught the sober and reverent attention of two great countries who are pledged to retrieve them and their sailors from the cold, dark deep, and set each in a final resting place - the ships on the lake shore in Confederation Park and the men in Arlington National Cemetery, Washington, D.C. As I said in my last comments, "...history made and in the making".

Welcome aboard to all you new members. We hope each of you will benefit from your membership and enjoy BOTTLE SHIPWRIGHT. and in turn, we hope to hear from you and see your contributions of plans, ideas and pictures of your works. It is these that make our Association and magazine possible.

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Jack

EDITOR'S NOTES

As many of you know, I have not been in favor of an increase in dues, especially since we have steadily been in a good financial state under Steve Hahn's watchful eye. But it was his own observation that finally convinced me. Though we may be fine right now, with postal increases and other rising costs, we will be headed into trouble down the road. So with this issue, I regret we must post notice of this increase. I think the cost is still moderate, and should insure we will be able to go on without scrimping for the next few years.

Please note, with this issue, all dues are now due. From now on, all renewals will fall due with the second issue of each year. This change should now end confusion we had with our quarterly renewals. Steve has kept records of those of you generous enough to renew in advance and your cases will each be handled separately.

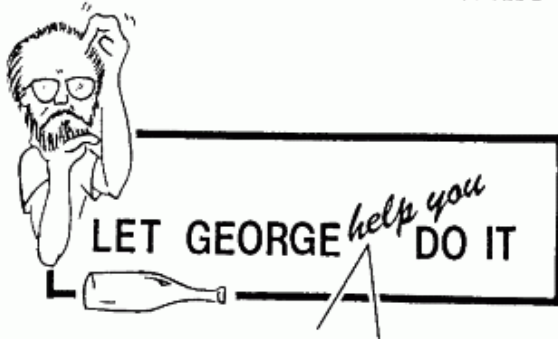
I'm pleased to have a good variety of technical ideas with this issue. Though your own projects may not be directly related to those covered by our contributors here, I hope you will be able to glean an idea or two from their experiences to add to your own work. Along with thanks to these authors, I want to add my gratitude to Don Hubbard, who handily edited and word processed the longer articles as well as the news from Japan.

Thanks to Bill Westervelt for his assembling a list which lets travelers and researchers know where ships in bottles can be seen in public collections in the U.S. One word of advice: since these institutions do not always have their models out on display regularly, it's a good idea to call or write before going. You might miss some of the best of the collection.

Before closing, I want to add thanks to Ralph Preston, Bob Campbell and Paul Fisher for their support of our second appearance at the Old State House last month. This is still a modest event, but does promote awareness of SIBAA in the Greater Boston area, and to the many travelers who came here for the holidays. Among our many visitors, I will mostly remember a young man of about six, who eagerly approached us with "a desperate need for a ship in a bottle". If we did our job properly, he should have one soon, and it is with such craftsmen as this that our real future lies.

Good Bottling,

Ally



One of the most important functions of our organization is the exchanges of ideas and information on building techniques. George Pinter, a long respected ship in bottler and artist has offered his services and experience. If you're stuck on some point, write to George for a way to resolve your particular dilemma. Chances are he has encountered the same problem himself over the years. Or if it is a new question to him, he will refer it to another experienced member who may have come across it before. Likewise, if you've just developed a new and better way to do something, pass it along to George. His address: 199 Elm St., Halifax, MA 02338. George will also be summarizing inquiries and ideas for regular publication here. So when in doubt, let George help you do it!

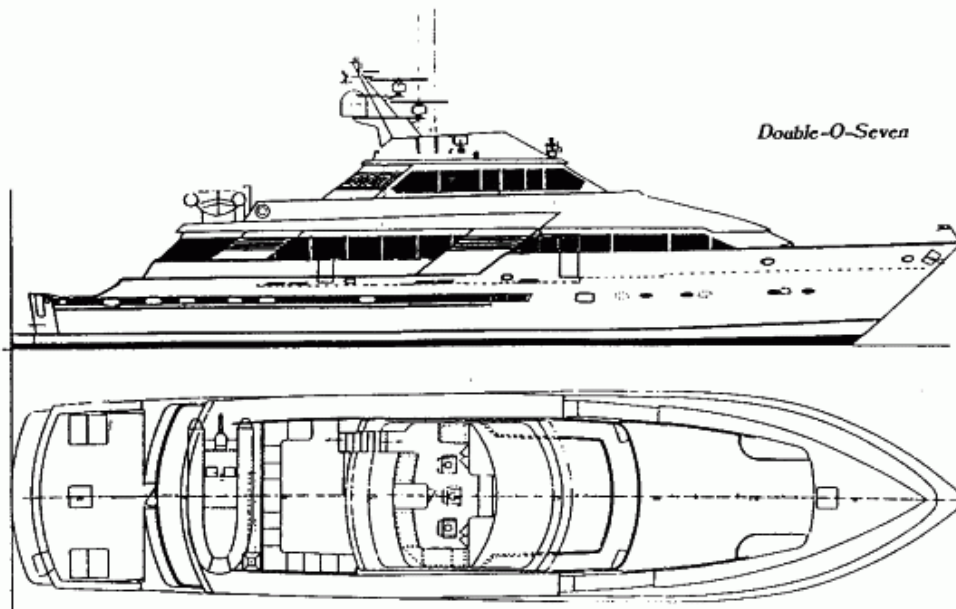
BUILDING THE 007

by
George Pinter

The motor yacht Double-O-Seven was built by Denison Marine, Inc. in Dania, Florida, in 1987. The vessel is 110 feet LOA with a beam of 26 feet and draft of 7 1/2 feet. Of aluminum construction and powered by two 1,960 HP engines, she is not only fast, but beautiful as well; sleek and graceful of line and luxurious in appointment.

I was commissioned to build Double-O-Seven in a bottle, to be presented to the owner of the boat. While the owner knew nothing of the project, the captain and crew were pleasant and quite helpful. Their assistance was invaluable to me.

The Saint (my wife) and I had the pleasure of going aboard several times to sketch, take photographs and make notes. The Saint is my photographer, and she took eight rolls of pictures. Without those detail photos it would have been impossible to accurately construct the model. This may seem like a lot of photos, and it is, but there were still times that I had questions, something that just was not clear in the references. At these times I called Mike, the captain, and he always had a ready answer for me. Mike was also able to get a set of the original plans for me, both top and side views. The plans were then reduced on a photocopy machine to the size that the model was to be. The scale worked out to be 1" = 11.8'.



I usually try to select a bottle with a shape compatible with the silhouette of the vessel or its general style since this adds to the

overall aesthetic impact of the finished model. Unfortunately, I could not do this with Double-O-Seven. Considerable time was spent trying to find a suitable bottle, one that was large and of decent quality glass and pleasing shape. I finally settled on a laboratory flask. It filled the first two criteria - and I figured that two out of three wasn't bad! I don't think this bottle detracts from the model, but a long, rather than globe shape, would have further complimented the sleek lines of the hull.

The vessel has a beautiful, seemingly flawless finish of white with black trim. After welding, all seams were ground, then a filler applied. The only weld beads I recall were at the bow where the inner bulwarks meet the deck. This finish gives the illusion that the boat is molded of a single piece.

This construction presented a few problems for me since I wanted to minimize and disguise my construction seams as much as possible. Because of the model size, it would have to be constructed in several parts, then assembled in the bottle. This became an exercise in "puzzle engineering". The finished model consists of ten sub-assemblies, plus sundry accessory parts like the tender on the deck, davits, etc.

After carefully studying the plans and photos, I figured out how I wanted to attack the problem. To prove my theory and perhaps avoid later anguish, I constructed a small, rough mock-up about four inches long. This small model had no detail, was not painted, and does not have the finished contours. Half of the bow was finished though, and templates made. These were then enlarged to the size of the plans and used to shape the larger hull.

The model is of solid construction, the wood being roughed out and the final contours shaped with a polyester resin to achieve graceful compound curves. To hide any longitudinal seams, the hull is split in half (slightly off center to permit me to install the centered anchor, chain and winch before the hull halves were joined). The main deck is a separate piece that slips forward into grooves on the inner bulwarks of the bow (see figure 1).

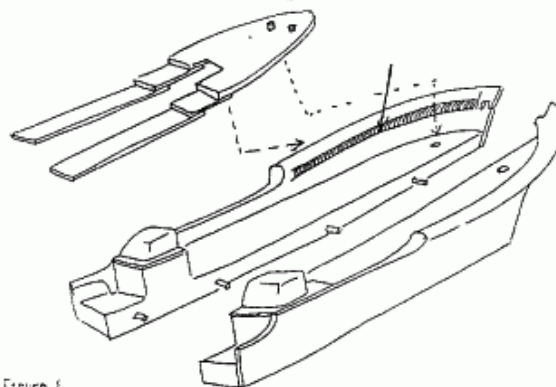
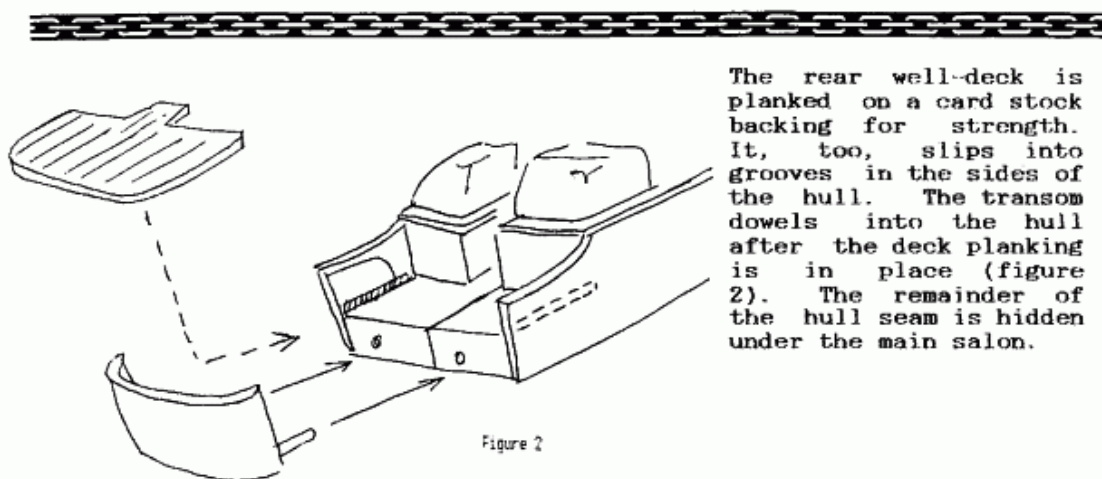
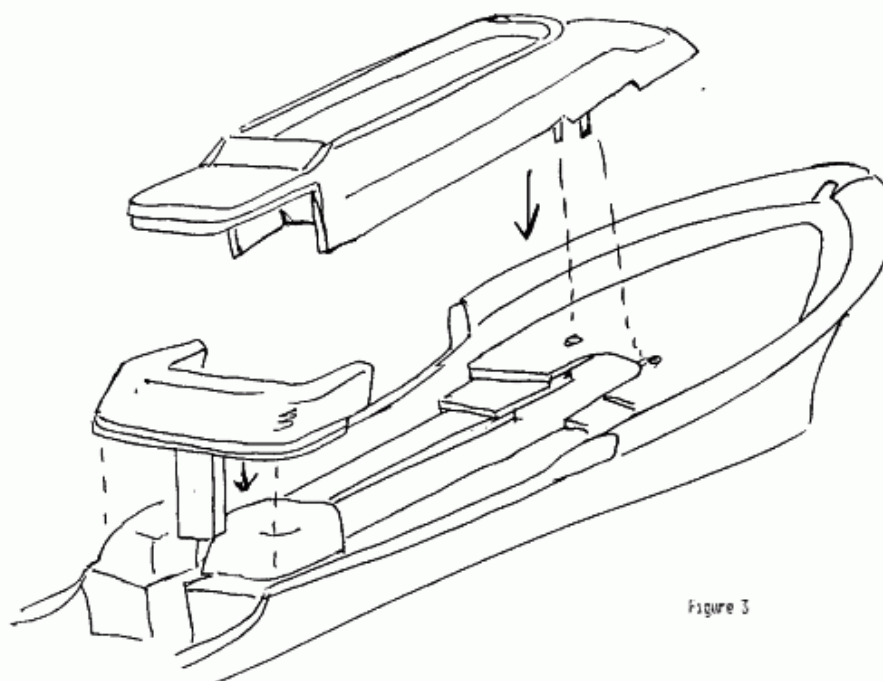


Figure 1



The large rear window of the main salon, the trim below it, and the door into the main salon from the after deck, are one assembly. After installation, the main salon was installed and doweled into the hull (figure 3).



The pilot house and open command bridge were originally constructed of two parts doweled together. I did find that they would fit through the neck (barely) if joined, so they became one assembly that doweled into the top of the main salon. The ladder to the open bridge and wet bar are also part of this sub-assembly (figure 4).

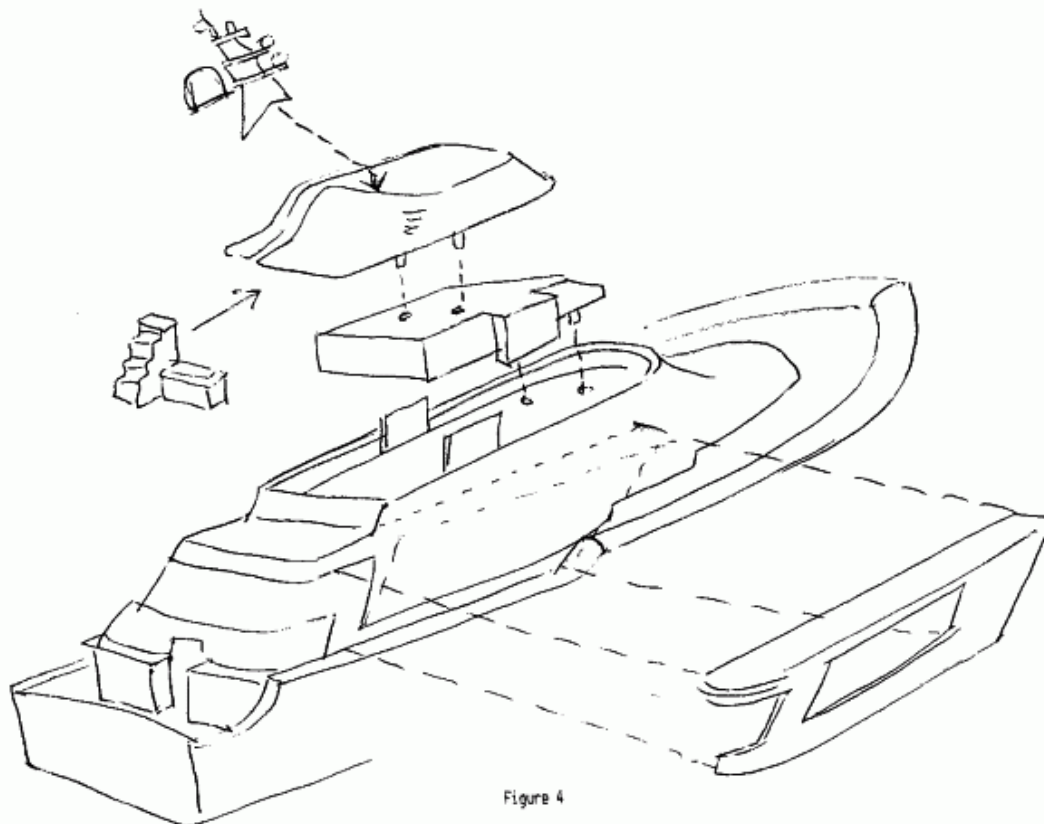


Figure 4

The roof over the main deck, each side, and the forward and after breaks are one piece and fit into the sides of the main salon, resting on the bulwarks (figure 4). The mast doweled into the command bridge.

Aside from the "puzzle engineering", most of the construction was ordinary scratch-build modeling; improvising, fabricating, fitting, discarding, and starting over! The size of the model dictated incorporating a lot of details normally omitted from the average ship-in-bottle. But this size, about 10", prohibited the luxury of

commercial model ship fittings which were either too large or the wrong style for my needs. Consequently all parts of the Double-O-Seven were fabricated by hand.

The oval hawse pipes were made from aluminum tubing flattened to the oval shape. Frames for the hull windows aft were similarly made.

The bitts were made of aluminum, in two parts, then joined together. About twice as many bitts were made than required, then those that were most similar were selected for use.

The searchlights are also aluminum. These were made by hand because I felt this would be as quick as turning them on a Uni-mat. Each light consisted of three parts; two pieces of tubing "telescoped" together with a solid rod inserted. These were epoxied and when set, the rear end was shaped. The hollow front end was clear epoxy to form the lens (figure 5). Due to the size the seams are barely perceptible.

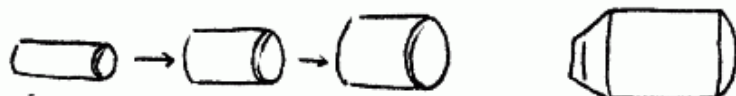


Figure 5

The wheel for the command bridge is a suitably sized watch gear with the cogs filed off. Seat cushions were made from a white styrofoam food "take-out" container. This material cuts easily, and can be sanded with fine grit paper. They were painted with a 50/50 mixture of glass and flat white paint.

Canvas areas, including the tarp on the launch, initially posed a problem. I did not want to use paper and could not find a cloth with a fine enough weave. I settled on masking tape which has a suitable color and texture. To insure permanence, it was glued in place.

All windows on the prototype are tinted. The rear window of the main salon was modeled from tinted plexiglas, and the remaining windows were cut from acetate scraps from a photostat. The windows were fixed in place with a special double-backed adhesive obtained from a photoengraver. This adhesive could have several useful applications for modelers. It is quite thin and ultra-tacky. To best describe it, it is like the adhesive on Scotch cellophane - without the cellophane. (Editor's note: This is probably Scotch Adhesive Transfer Tape #924 or #925, which is available in most good art or graphics supply stores.)

Horns were formed by dropping small bits of solder onto the bench, resulting in rounded parts with a flat side. Those of similar size were selected for use. The horn trumpets are small plastic tubes with successive coats of glue built up to shape the flared ends.

When all the main parts of the hull and superstructure were shaped, several coats of sanding sealer were applied, sanding between coats. This was followed by spray primer, then four coats of glass white were sprayed on, wet-sanding with #400 paper between coats. The final coat was lightly sanded with #600 silicon-carbide paper and given a final spray of clear high-gloss. This may seem like excessive

amounts of paint, but this helped fill in and smooth contours, particularly around the pilot house/bridge area, resulting in nicely rounded joints and edges.

Some areas of the boat are non-glossy, such as the non-skid traffic patterns on the decks and the roof of the pilot house in front of the open bridge. These areas were simulated by carefully rubbing with a pencil style typewriter eraser. It was soft, yet abrasive enough to break the gloss of the paint without damage to the painted surface.

Referring to the side view plan you will notice that there are number panels on each side of the pilot house aft. On the vessel, these are black and white painted stripes and at night, the numerals 007 are illuminated. These numbers also light up on the model which was a major problem for me. Their construction will be the subject of an article in the next issue.

With the completion of the lighting the model was essentially finished, leaving only the background landmass to complete. I made most of this in pieces and then joined these together inside the bottle. Auto body filler (Bondo) was the basis for this. Large amounts were mixed and formed into thick "cakes". Pebbles were randomly inserted and allowed to set. As the filler hardened, it was molded into high and low spots. Dragging a spatula over it just in the final stages of hardening produces a rough texture. It was then painted with Floquil "Roof Brown" and "Depot Buff."

In addition to the usual trees and shrubs, other details include an old shack with a bridge across a stream. The path leads to the "little house out back" and there are two boys at the other end of the bottle flying a kite (with one hung up in a tree). The autumn colors were used to offset the stark white of the boat, and the rough shack was used to contrast with the sleek lines of the vessel.



Most modelers will agree that bottling a contemporary vessel is considerably simpler, than say, a fully rigged clipper, and I would tend to agree in many cases. However, Double-O-Seven was much more difficult than I had originally imagined, even after I had my first glimpse of the vessel. Part of this was due to the puzzle engineering required, some from the installation of the lights, and then it is the largest ship I have ever bottled.

Having bottled all manner of things over the years from ships to trucks to dioramas and foolish whimsical items, Double-O-Seven was the most challenging model I have ever made.

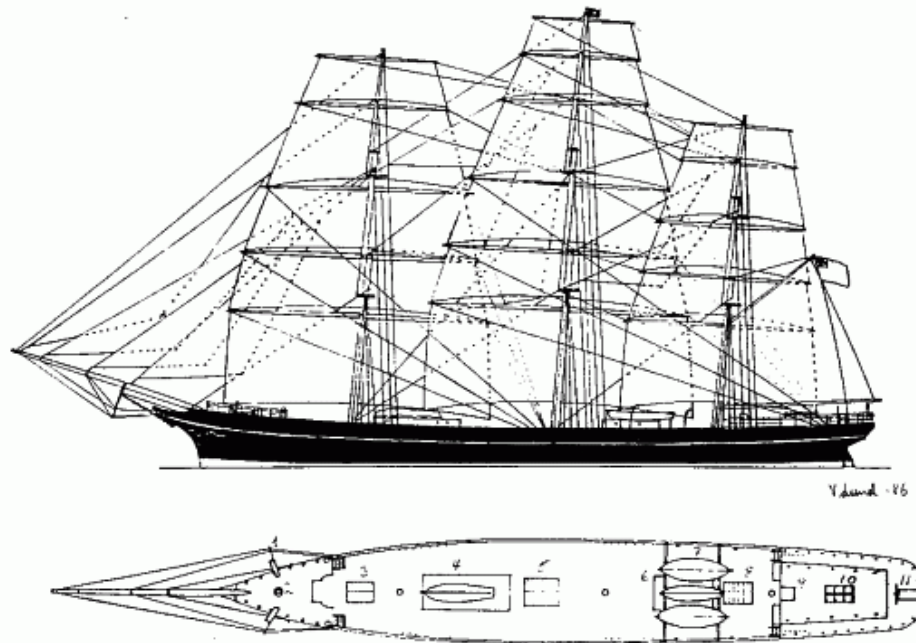
CUTTY SARK

Plans by Vidar Lund

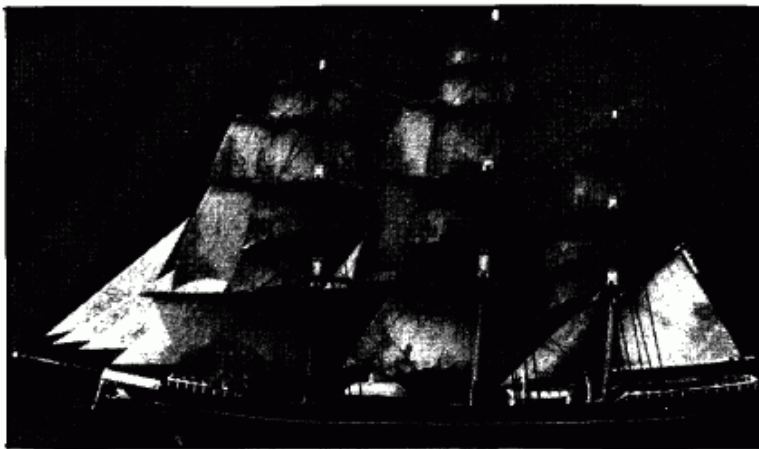
(previously published in BUDELSCHIFF EXPRESS)

Models by Glenn Braun and Freido Flossner

This famous clipper needs little introduction. Designed by Hercules Linton, she was built at Dumbarton, Scotland, and launched in 1869. The tea trade, for which she had been designed, was going to the steamers instead of clippers already at the outset of her career. After carrying various cargoes, she finally settled into regular passages in the Australian wool trade, under Captain Richard Woodget. In 1895 her owner, Jock Willis, sold her to a Portugese firm who renamed her the FERREIRA. In 1922, at the advanced age of 53, she was spotted by retired Captain Wilfred Dowman, who remembered her from his early days at sea and purchased her. He had her rerigged and fitted out as a training ship. She served in this capacity until 1952, when the CUTTY SARK Preservation Society was formed under the auspices of the Duke of Edinborough. As is well known, she survives until this day in permanent dry dock at Greenwich, the sole survivor of the clipper ship era.



CUTTY SARK was built as a composite clipper. Her frame and beams are of iron but her planking and decks are of teak. Her design is certainly noteworthy. Because she is smaller than her American counterparts from earlier in the century, she was not as fast (waterline length is one of the greatest factors effecting a vessel's speed) but had a number of remarkable passages to her credit, which stood up well to her contemporaries. As well as being a noted sailor, she has always been revered for her handsome lines and proportions.



Model by Glenn Braun

Although commercial sailing ships would continue long into the 20th century and pleasure sailing craft right up to our own times, CUTTY SARK well represents a peak of refined sailing design for speed and commercial purpose. Modelers seeking more detailed information can find it in C. Nepean Longridge's fine book on this

ship. Though modelled many times before, she is handsome and historically noteworthy enough to be recreated many times again.

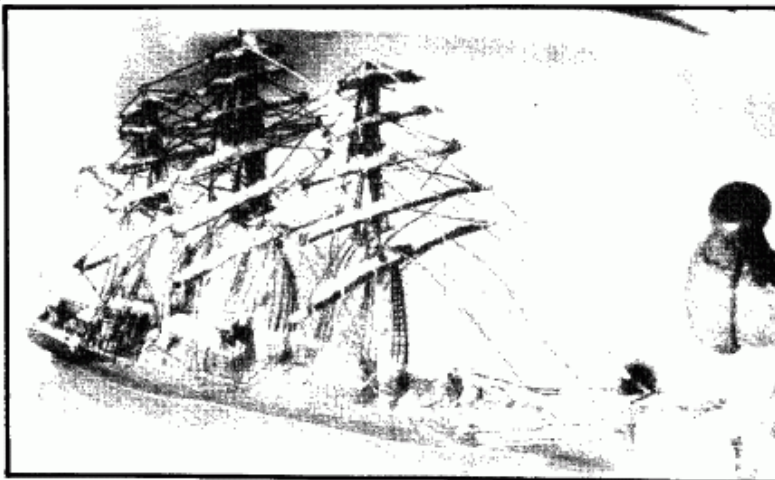
Legend:

- | | |
|---------------------------|---|
| 1. Cat heads - white | 2. Capstan - dark gray |
| 3. Fore Hatch - dark gray | 4. Deck house - teak, with white boat |
| 5. Main Hatch - dark gray | 6. After Deck House - teak |
| 7. Life Boats - white | 8. After Hatch - dark gray |
| 9. Coach House - teak | 10. Skylight - teak with silver windows |
| 11. Wheel trunk - teak | |

General color scheme:

Hull - Black with white figurehead, inner bulwarks, davits & railings. Molding trim, teak. Trim at bow and stern, other than figurehead, gold. Below waterline, copper.

Rigging - White lower masts, mast doublings, bowsprit, boom, gaff and martingale. Yards, black. Upper masts and jibboom, natural.



Model by Freida Flossner

NOTES ON FINISHING THE FIGURINES

by Ralph Preston

I use a flat Pactra enamel. Pactra is an ordinary enamel manufactured in the United States. It seems to adhere well to the epoxy which forms the outer surface of the figures. I have not made an extensive study of other brands. They are probably of as good quality but I have little experience with them.

Paint, much like glue, goes through a "hardening" or (curing) profile. Most manufacturers say that the paint dries in about one or two hours, but this usually means that it is "dry to the touch" in that time.

The following discussion refers to the "Drying Profile Sketch" (further along) and holds pretty well for Pactra paints. The properties may differ for competitive brands. I suggest you experiment with any brand you use, including Pactra.

Phase I. Immediately after painting, the paint is still wet and will stick to a small knife or spatula. I have ground some needle points flat and sharpened others to form small knives and spatulas for forming paint (see later discussion).

You can use this "tacky" phase to form a rough matted surface if you want, but this operation is risky in this phase. The properties are changing rapidly and the paint may adhere to your forming tool resulting in a helluva mess!

Phase II. I have defined phase II as the region where the paint does not adhere to a tool unless the tool penetrates the surface. In this period the paint is sticky just below the surface, but the surface itself will not adhere to the tool. Details can be formed and outer features can be worked into the paint, i.e. beards, hair textures, etc. The fine wire brush works well for this.

Imperfections in the paint can be troweled out with the smooth back of the tools (see later discussion). Cutting during this period is inadvisable since the tacky region would be opened to the cutting tool.

Phase III. During this phase I tend to leave the project alone. The region just below the surface has begun to harden and deforming it usually scars the region. Troweling may tear away chunks of the paint and cutting may have the same effect. Wire brushing can yield a very buff surface.

Phase IV. During this phase one can cut or shave the surface with a sharp knife without fear of unexpected damage. The region below the surface is firm with no "tacky" regions unless a very thick layer was put down. I use this time to chip off regions where I may have inadvertently painted into the neighboring region - hair paint on face or vice versa, for example.

It is well to wait until this phase to scrape off the undesired overlays. While wet, the later layer softens that underneath. Scraping-cutting in this condition seems to do more harm than good.

Shaving-cutting seems to leave a very buff surface. Troweling-smoothing with a smooth surface leaves a shiny region. To remove these effects do some "chemical polishing." Brush the surface very lightly with thinner. Immediately repeat with (perhaps) the same brush still damp with thinner. The more you brush on the more deeply it goes until the paint can be removed. A 10/0 brush is great for this. The net result of the above is to leave a buff surface with no shiny spots or rough regions.

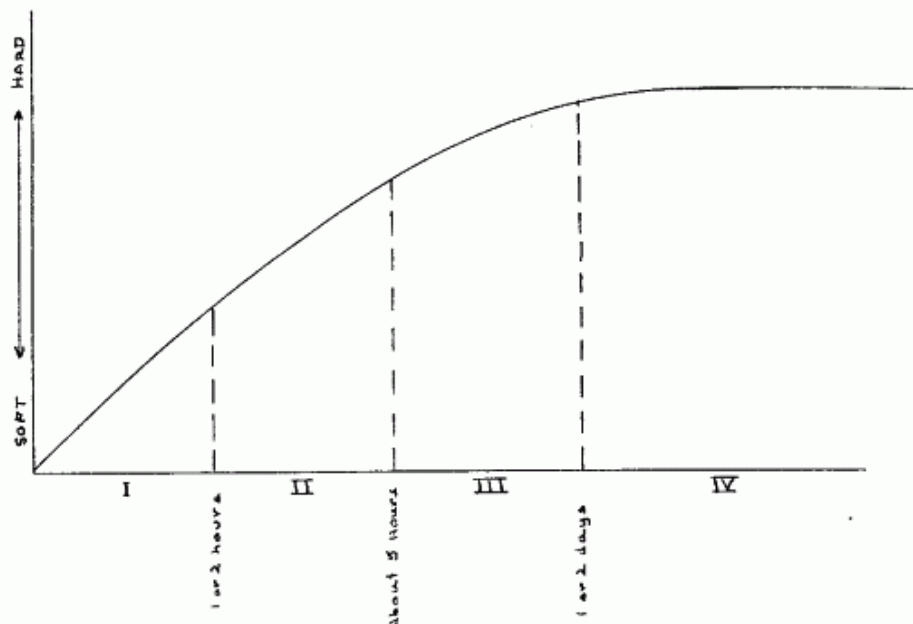
You can generally "back down" the drying profile curve by brushing on a little solvent, but the effect is naturally more pronounced on the surface than when the paint was first laid down.

I have had a special problem making eyes. I usually lay down oversize whites and wait about two days to chip or trowel them into shape. Sometimes I "frame" the eye with appropriate dark paint at this time. This is a bit risky since if you overrun the white region, removing the overlay is tricky. A safer method (also more time consuming) has been to make the frame mentioned above slightly oversize, then trowel it into place a couple of hours afterward (Phase II). Then add the pupil-iris with a cat's whisker brush mentioned later.

For painting on a small scale, I use a brush formed from a cat's whisker. You can easily make 8 or 10 brushes from a single whisker. Ask a cat lover for some whiskers. I understand they lose them from time to time. Don't remove one from a cat. It is unnecessary and painful (to both you and the cat if it has any spirit). The manufacturer produces a tapered product, so if you cut one into pieces about 3/8 inch (9 mm if you happen to live in a civilized country) you will have about 8 or 10 brushes ranging from very small to very coarse. Mount each on a handle as described below.

I have used my thumbnail as an easel for painting with interesting side effects. The paint dries much more rapidly on your nail as well as on the cat's whisker, perhaps due to the warm surface, perhaps due to having some solvent absorbed by the nail. Although this technique is very handy, it requires much more frequent addition of paint or solvent to your "easel." By the way, you don't have to buy the quarter ounce bottles of thinner from your friendly hobby shop. Mineral spirit paint thinner can be bought for about \$1.50 per quart from any paint or hardware store.

Cleaning the cat's whisker is very easy. You simply peel off the paint between opposing finger/thumb nails. The use of a cat's whisker was suggested by the young son of a friend. He had read of the technique, which was completely unknown to me. I paid him for the whiskers he provided and added a consultant's fee. I felt that it was a good time for him to learn that information has value.



Phase I. Paint is wet- tacky at this time. Properties are also changing rapidly. Wet forming is risky since the paint clings to almost anything.

Phase II. Paint is "malleable". It can be formed with smooth surface tool. Region just below the surface is tacky and will usually adhere to an edge that scrapes through the outer skin.

Phase III. The coating is stiff and resists deformation. Usually ruptures if deformation is attempted. I customarily leave project alone in this phase.

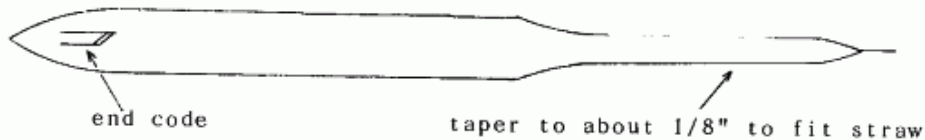
Phase IV. At this time the surface is still malleable with a little more force than in phase II. It can be cut, troweled, shaved, etc. with less danger of "unexpected damage."

When you are satisfied with the general form of the finish, the chemical polishing mentioned earlier will leave a flat finish removing the shiny spots from the troweling and other work.

The times mentioned on the drying profile will be shifted generally to the right if you use a thin mix, and to the left for a heavier mix.

THE TOOLS

For the brushes, the knife, chisels and scrapers as well as the wire brushes I use a standard handle design cut from a length of 5/16 inch wooden dowel. A tip protector is made from a piece of small soda straw.

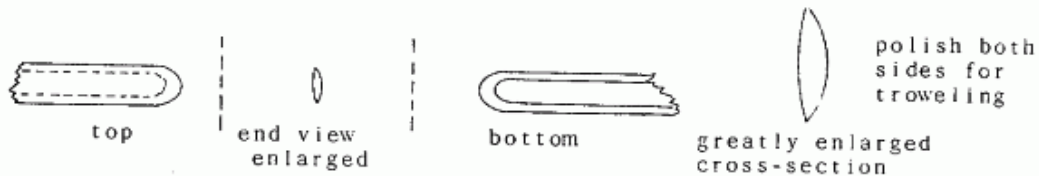


"Boat tailing" the end makes it easy to pick up the tool without getting vaccinated. The coded marking on the end makes it possible to identify the tip without removing the soda straw protector.

First the cat's whisker paint brush. Clean the whisker with gasoline to remove oil. Slot the end of your handle with a razor saw down about 1/8". Fill the slot with a drop of epoxy and insert on end of the cat's whisker. When the epoxy has hardened, sand the end down to a point and you are done.



The general purpose spoon, knife, gouge, chisel and trowel (how much more general can you get?) is the only tip I have not seen in a larger version.



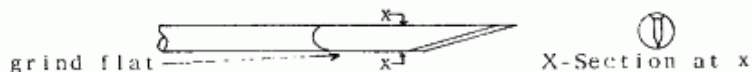
The needle is ground flat with the cut-off disc from a roto-tool kit. (wear protection!). This anneals (softens) the steel at exactly the region where you want it hardened. I used to harden the tip before finishing the edge and point. This has the bad side effect of making the whole end brittle. I got lazy in later years and cut out the heat treating. The edges seem to hold O.K.

The above and following shapes are finished with an Arkansas stone and/or soft soapstone. I particularly like to do the smoothing operation with a soapstone.

This tool is versatile, allowing many different cuts to be made as well as some buffing/troweling operations. The tip is embedded in a handle identical to that of the paint brush except that I usually drill out the end with a #75 or 80 drill to take epoxy.

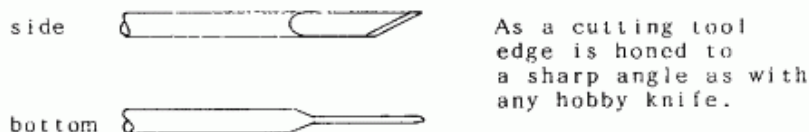
The idea of the spoon, gouge, etc., was to be able to smooth, cut or shave in about any direction without having to fish out another tool for a special cut or whatever. So this tool is sharp on all exposed edges for cutting, and has a smooth back and face for deforming regions.

Edged lance is also ground from tip of a darning needle. The edge is sharply pitched for cutting (as against shaving or scraping)



Grind sides flat then sharpen with an Arkansas stone or soapstone. Impale in handle as previously described.

General cutting tool. This looks like a standard X-Acto knife but has been miniaturized. I also use a scraper of the same general shape. The edge of the scraper has been honed to about 70 degrees as shown in the sketch. It is used to remove thin flakes of paint (or epoxy for that matter). It is not used to make deep incisions.



Gouge. A rounded gouge is very handy for digging out small pockets, etc., The concave section is ground out with the cut off disk from a roto-tool kit. The inside honing is done with a piece of a broken disk. The final edge is honed on the outside with a standard Arkansas stone or the like.



Note the direction of rotation of the wheel. If you use it in the opposite direction you get some extra busted wheels plus some small pieces in the face.

End chisel. The end chisel is rarely used but badly needed in some situations.



Small wire brush. The best one I have was made using .003" diameter stainless wire from the old magnetic recording industry (circa 1947). That comes out to about 0.08 mm if your from the most progressive part of the world.

I bent each of about five wires into hairpin shaped pieces, and encapsulated the bight in the epoxy filled hole shown below. To get the "bristles" to stay in close formation, I tied a piece of thread around them before the epoxy set.

To get a reasonable stiffness in the brush you want the exposed

length to be no more than 1/8th inch. Less if you use copper wire. There is plenty of copper available in electronic "zip cords" but it is very limp. The stainless used to come in rolls of about 5000 feet, this is nearly a 300 year supply. After that you'll have to look for other sources.



Drill #80 into the end of the standard handle. A #80 drill is about .3 mm diameter.



Insert about 5 hairpin shaped bristle pairs into the epoxy filled hole-double end first.



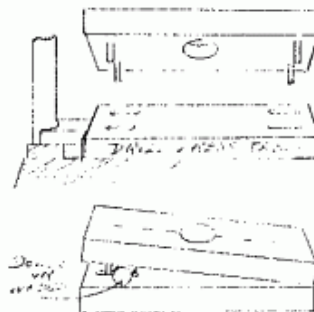
Tie bristles together until epoxy hardens, then clip bristles to about 1/8" long. I usually grind the ends square with the cut-off disk before removing the thread tie.



OH NO! RAKED MASTS!

Bob Campbell

When I attempt to drill deck holes for raked masts by eye, there is a good chance they'll look as if they were placed there by a committee. I recently solved that problem by replacing the scrap wood used as a base on my Dremel Drill press table with a flat and square piece of 1/2" pine. A hole was drilled in the center, for a bit of clearance, and four 3/16" dowels placed to fit in the slots in the table. These dowels must extend 1/2" to 5/8" and allow 1/8" clearance in the back of the rear slot. With the aid of a protractor and either a dowel or a wedge, I can tilt the table to the desired angle of rake and tape it into position. A center-line, drawn on the base, is used to position the hull and perfect holes are the result.



NEWS ON BOOKS

There is much good news:

Ships-in-Bottles. A Step-by-Step Guide to a Venerable Nautical Craft - The publication of the second edition of this classic by Don Hubbard is imminent. As mentioned in the last issue, the new edition is an expanded version of the book that got so many modelers started. The expansion includes many tips and ideas from SIBAA members. To order, write to Don at P.O. Box 550, Coronado, CA 92118. The cost is \$16.45, which includes \$1.50 for shipping.

Dover Publications - This paperback publisher has taken on republishing many of the classics from earlier in this century. Among these are some of the famous works by the noted Charles Davis, including, **Ship Modeler's Assistant**, **Ship Models: How to Build Them** (with plans of the Sea Witch) and **Ships of the Past**. This last has plans of fishing schooners, Baltimore clippers, the Packet ship **Issac Webb**, and frigates **Raleigh** and **Congress**. They have also published Howe & Matthews' **American Clipper Ships**, Frederick Matthews' **American Merchant Ships** and Basil Lubbock's **Down Easters**. These are inexpensive, but well bound paperbacks which may not be readily found in bookstores, but should be easily obtained by special ordering.

Tom Matterfis - This member has made a generous donation of materials or ideas for the rest of the membership a number of times before. Now he has sent in a collection of books he no longer feels the use of, and these are offered to the rest of the membership for a simple UPS charge of \$2.00 per book:

American Fishing Schooner BENJAMIN W. LATHAM, Eric Ronnberg, Jr.

The Four Masted Bark, Edward Bowness

Seventeenth Century Rigging, R.C. Anderson

Ship Models, pamphlet from the British Science Museum, Kensington

American Ship Models and How to Build Them, V.R. Grimwood

Last of the Square Rigged Ships, J. Ferrell Colton

Ship Models - How to Build Them, Charles G. Davis

Plank on Frame Models, Vol. I, Harold A. Underhill

Plank on Frame Models, Vol. II, Harold A. Underhill

Obviously, availability has to be on a first come, first served basis.

Modelling Ships in Bottles, by Jack Needham, has been remaindered in hardcover. Check the bargain tables of your local bookstore for a good buy. Patrick Stephens Ltd, the publisher, has released a paperback edition. If you have trouble finding either, your editor picked up a couple of spare copies for \$4.98

Bibliography update - Occasionally, new information will come in to add to, or correct, the bibliography published in the last issue:

Roth, Milton. SHIP MODELING FROM STEM TO STERN. Blue Ridge Summit, PA: TAB Books, 1988. Chapter 6 on Ships in Bottles, pp.49-58.

Hand, Charles A. JOSHUA SLOCUM'S SPRAY OF BOSTON, Model Ship Builder, Vol IX, No. 52, March & April, 1988 (Note: Part I of this article was erroneously listed as MODELING THE SPRAY IN A BOTTLE, and as Vol. X instead of IX, in the bibliography)

U.S. MARITIME EXHIBITORS WITH SHIP IN BOTTLE COLLECTIONS

Compiled by Bill Westervelt

California:

Allen Knight Maritime Museum
550 Calle Principal
Monterey, CA 93940

National Maritime Museum
Polk St.
San Francisco, CA 94109

San Diego Maritime Museum
1306 N. Harbor Dr.
San Diego, CA 92101

Connecticut:

Mystic Seaport Museum
Mystic, CT 06355

Connecticut River Museum
P.O. Box 261
Essex, CT 06426

Delaware:

Lewes Historical Society
119 W. 3rd St.
Lewes, DE 19958

Georgia:

Ships of the Sea Maritime
Museum
503 E. River St.
Savannah, GA

Maine:

Maine State Museum
State House Station 83
Augusta, ME 04333

Isleford Historical Museum
Acadia National Park
Rt. 1, Box 1
Bar Harbor, ME 04606

Penobscot Marine Museum
Church St.
Searsport, ME 04974

Maine Maritime Museum
963 Washington St.
Bath, ME 04530

Virginia:

Mariner's Museum
Newport News, VA 23606

Maryland:

Chesapeake Bay Maritime Museum
Navy Point
St. Michaels, MD 21663

Calvert Maritime School
Solomons, MD 20688

Maryland Historical Society
201 W. Monument St.
Baltimore, MD 21201

Massachusetts:

Custom House Maritime Museum
25 Water St.
Newburyport, MA 01950

Kendal Whaling Museum
27 Everett St.
Sharon, MA 02067

Peabody Museum of Salem
East India Square
Salem, MA 01970

North Dartmouth Historical
Society, Whaling Museum
18 Johnny Cake Hill
New Bedford, MA 02714

New York:

Suffolk Marine Museum
P.O. Box 144
West Sayville, NY 11796

South St. Seaport Museum
207 Front St.
New York, NY 10038

Franklin D. Roosevelt Library
259 Albany Post Rd.
Hyde Park, NY 12538

The Whaling Museum
Cold Spring Harbor
Long Island, NY 11724

Oregon:

Columbia River Maritime Museum
1792 Marine Dr.
Astoria, OR 97103

NOTES FROM JAPAN

by

Juzo Okada, President, Japanese Ships-In-Bottles Association
from correspondence to Don Hubbard

Plans for the new Osaka ship-in-bottle museum are continuing. I have passed my ideas along to Dr. Sasaki, who is the overall coordinator, and he is drawing up plans for the spaces. The museum will be part of a huge complex surrounding a large aquarium being designed by an American specialist. This aquarium will be the largest in Japan. The museum will be run by members of my Association and myself. We are also helping with the financing, but we are not yet certain which way to go on that. Various proposals are under consideration and we should know soon. I will keep you apprised of the situation as it develops.

One of our members and I have been giving lessons in ship-bottling to prisoners in cooperation with the Legal Affairs Bureau. I visit them four times a year and provide plans, while the other member, who lives closer, goes monthly. Prisoners must work and pay some of their expenses. This used to be easily possible because they could work in local factories, but many of these are now moving overseas, and work has become scarce. This is why our efforts have been welcome. Prison wages are set by law and are not great. To help increase the price received for the finished product I designed a bottle stopper and a stand for the models and that has helped them to get better prices.

The prisoners are building about 40 different items. Unfortunately the number of prisoners who are assigned to this group is also set by law so it is impossible to increase production. I ordered 50 of the bottle stands which I had designed and they reached me two months later. The price is 700 yen (\$5.20). All of them were sold to our members within two weeks. All of the models produced by the prisoners have been immediately purchased by the staff of the prison. I now have two apprentices from the prison who are working very hard to learn the art. One is a pickpocket and the other a pilferer. Introductions will be in order if any of you come to Japan for a visit!

As an aside, I am now making hulls of balsa wood coated with glue. The glue penetrates the wood, making it hard and easier to handle.

Please convey my regards to the members of your Association.

THE QUEST

by Bill Johnston

from CHIPS & QUIPS, newsletter for the Penna. Delaware Wood Carvers

You've all heard of the character who built a boat in a basement workshop only to find he couldn't get it out without tearing down a wall; well, meet his carving counterpart. As you know, I'm into building ships in bottles, and, like our bird carvers, try to put more detail into every successive project. The current ship, a 3 masted clip-

per. was made a little bigger to accomodate the added detail - a windlass, deck houses, hatches, ship's wheel, twp life boats, etc. Making the hull a little larger meant making the masts a little taller to keep everything in proportion. Ever try fitting a ship 4 1/2 inches from keel to masthead into a whiskey bottle which has a standard three inch inside diameter? Very difficult indeed!

A trip to the friendly State store was called for; so, armed with my trusty tape measure, I set out in that direction happily humming "Anchors Aweigh". Working my way through the sections of cordials, gins, vodkas, ryes, and bourbons, that little old tape measure really got a workout. I measured so many bottles of Scotch, I was sure I heard the swirl of the Pipes of the Seaforth Highlanders in the distance and was developing a certain dryness in the throat. I was about to start on the aisle of wines when I noticed the two clerks over at the cash register glancing at me in a strange whispering.

Since discretion is the better part of valor, I quickly grabbed a bottle of Scotch and was on my way before they could pick up the phone and call the man in the white coat. Back at the workbench, the ship is not bottled, but there is something melodious about the clink of ice cubes in a glass of Scotland's well known export! Anyone know of a glass blower with experience in enlarging whiskey bottles for a nominal fee?

Editor's Note: BILL JOHNSTON'S ship in a bottle recently took a Blue Ribbon in the annual exhibit of the Penna. Delaware Wood Carver's Association. Bill is also the editor for CHIPS & QUIPS.

MICHAEL GUALTIERI, of 914 W. 37th St., Erie, PA, writes in with the exciting news of the coming launch of of the full sized replica of the United States Brig, NIAGRA, Commodore Perry's Relief Command at the Battle of Lake Erie. Launch date is set for Sept. 10th, on the 175th Anniversary of the famous lake battle from the War of 1812. Michael will be happy to supply interested members information on the project, which he has followed closely.

WELCOME NEW MEMBERS

David Allegrucci, 2358 San Rae, Apt. N, Kettering, OH 45419
Gerald J. Blaha, 745 N. State St., Mishicot, WI 54228
Richard L. Kreutz, 3030 McKinney, No. 603, Dallas, TX 75204
Fred McConville, 8744 NW 29th St., Coral Springs, FL 33065
Jim Newman, Sudetenland Str. 30, 8019 Glonn, W. Germany
Donald Nobles, 4415 26th SW, Seattle, WA 98106
W. K. Moffat, 16 Heath St., Wainuiomata, New Zealand
James K. Tanner, 1702 3rd Ave., New Brighton, PA 15066
David K. White, 2439 Graig Rd., Columbia, SC 29204
John Woosley, 15 Glenmarsh Way, Formby, Merseyside, England L37 8DX

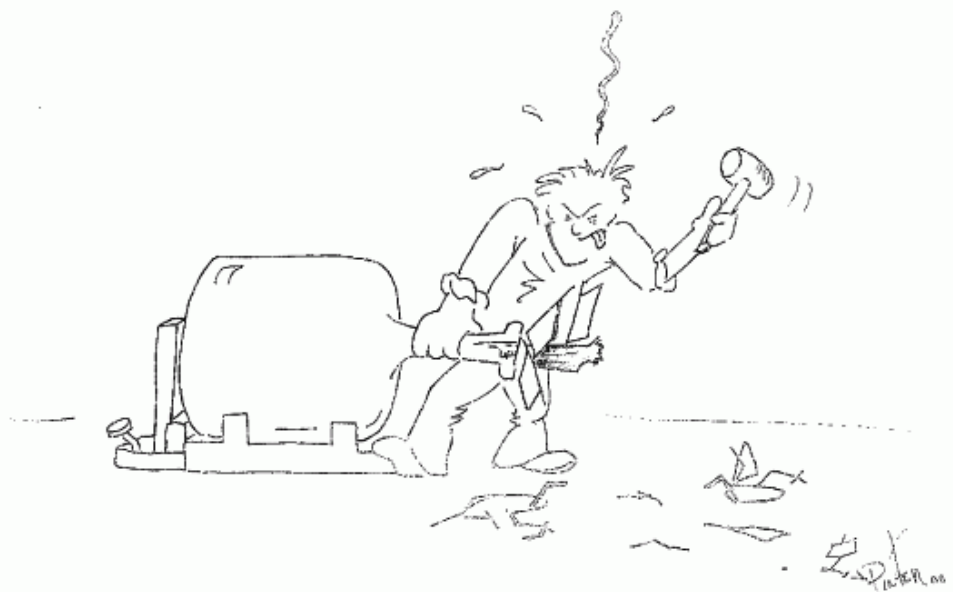
ADDRESS CHANGES

J. C. Bagette, 1908 Lenora Dr., Port Royal, SC 29935
Richard Garrahan, 4951 Swinton Dr., Fairfax, VA 22032
Willard Daniel Hills, 214 Farmbrook parkway, Stockbridge, GA 30281
Allan B. Campbell, P.O. Box 600117, Houston, TX 77260-0117



Two expressions of the same technique. On the left, an unnamed cartoonist's work from **BUDEL-SCHIFF EXPRESS**, which reads, "They laughed when I said I'd get a ship in a bottle!" Below, is George Pinter's handiwork, showing a common feeling!

ES WÄRE DOCH
GELACHT, WENN ICH
NICHT AUCH SO EIN SCHIFF
IN DIE FLASCHE KRIEGEN
WÜRDTE!



How DO THOSE GUYS DO IT.....?